

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A computer-readable medium holding computer-executable instructions, the medium comprising:

~~instructions for determining an intersection of characteristics common to a plurality of source blocks in a block diagram;~~

~~instructions for selecting at least one characteristic of a source block in a block diagram, said selected at least one characteristic being at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter in said intersection of characteristics;~~

instructions for receiving a designation of at least one destination block in said block diagram; and

instructions for propagating said selected at least one characteristic to said destination block.

2. (Canceled)

3. (Previously Presented) The medium of claim 1, further comprising:

instructions for creating a data structure for the selected at least one characteristic, said data structure having a plurality of substructures.

4. (Currently Amended) The medium of claim 1~~[[1,]]~~ wherein said selecting at least one characteristic involves the use of a category list, said at least one characteristic associated with at least one category of said category list.

5. (Canceled)

6. (Currently Amended) The medium of claim 1~~[[1,]]~~ wherein said destination block is a subsystem representing a plurality of blocks and said selected at least one characteristic is propagated to each of said plurality of blocks.

7. (Currently Amended) The medium of claim 1[[,]], wherein said destination block is a subsystem block representing a plurality of lower-level blocks and said propagating is restricted to propagating to said subsystem block without propagating to said plurality of lower-level blocks.

8. (Currently Amended) The medium of claim 1, further comprising:
instructions for undoing said propagating by returning the characteristics of said destination block to a condition existing prior to said propagating.

9. (Currently Amended) The medium of claim 1[[,]], wherein said propagating said selected at least one characteristic involves propagating less than all characteristics of the source block in said intersection of characteristics.

10. (Currently Amended) The medium of claim 1[[,]], wherein said propagating involves propagating less than all characteristics of the source block in said intersection of characteristics, as specified by a user.

11. (Currently Amended) The medium of claim 1[[,]], wherein said selecting involves selecting said at least one characteristic[[s]] to be propagated from a Graphical User Interface (GUI).

12. (Currently Amended) The medium of claim 1[[,]], wherein said selecting involves selecting said at least one characteristic to be propagated by the use of a shortcutkey.

13. (Currently Amended) The medium of claim 1[[,]], wherein said propagating involves propagating less than all characteristics of the source block in said intersection of characteristics, as automatically determined based on characteristics of said plurality of source block[[s]] and characteristics of said destination block.

14. (Previously Presented) The medium of claim 1, further comprising:
instructions for storing information relating to propagating to enable repeating said propagating.

15. (Currently Amended) The medium of claim 14[[.]] wherein said storing comprises storing information relating to multiple iterations of said propagating.

16. (Previously Presented) The medium of claim 1, further comprising:
instructions for determining which blocks of said block diagram have characteristics corresponding to the selected at least one characteristic in said selecting.

17. (Previously Presented) The medium of claim 1, further comprising:
instructions for determining which blocks of said block diagram have characteristics that could be propagated to said destination block.

18. – 19. (Canceled)

20. (Currently Amended) The medium of claim 1[[.]] wherein said selecting at least one characteristic is performed before said designating at least one destination block.

21. (Currently Amended) The medium of claim 1[[.]] wherein said ~~plurality of source~~ block[[s]] ~~is~~are a predetermined member[[s]] of a plurality of said destination blocks.

22. (Currently Amended) The medium of claim 1[[.]] wherein said designation of at least one destination block is performed from a text-based list.

23. (Currently Amended) The medium of claim 1[[.]] wherein said destination block does not have said characteristic prior to said propagating.

24. (Currently Amended) A system comprising:
a memory configured to hold a block diagram having a plurality of blocks; and
a processor configured to:

~~determine an intersection of characteristics common to a plurality of source~~
blocks;

~~select at least one characteristic of a block in the block diagram from said intersection, said selected at least one characteristic including at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter,~~

receive a designation of a destination block in said plurality of blocks, and
propagate said selected at least one characteristic to said destination block.

25. (Currently Amended) A computer-readable medium holding computer-executable instructions, the medium comprising:

instructions for receiving a designation of a source block in a block diagram;

instructions for receiving a designation of a plurality of destination blocks in a block diagram;

~~instructions for determining an intersection of characteristics common to said source block and said plurality of destination blocks;~~

~~instructions for selecting at least one characteristic of the source block, said selected at least one characteristic including at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter from said intersection of characteristics;~~

instructions for propagating said selected at least one characteristic to each of said plurality of destination blocks.

26. (Currently Amended) An apparatus comprising:

~~means for determining an intersection of characteristics common to a plurality of source blocks in a block diagram;~~

~~means for selecting at least one characteristic of a source block in a block diagram, said selected at least one characteristic including at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter in said intersection of characteristics;~~

means for receiving a designation of at least one destination block in said block diagram;

and

means for propagating said selected at least one characteristic to said destination block.

27. – 28. (Canceled)

29. (Currently Amended) The apparatus of claim 26, wherein said selecting involves selecting said at least one characteristic to be propagated from a Graphical User Interface (GUI).

30. – 33. (Canceled)

34. (Currently Amended) A computer-readable medium holding computer-executable instructions, the medium comprising:

~~instructions for determining an intersection of characteristics common to a plurality of source graphical objects in a Unified Modeling Language (UML) diagram;~~

instructions for selecting at least one characteristic of a source graphical object in a Unified Modeling Language (UML) diagram, said selected at least one characteristic including at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter of in said intersection of characteristics;

instructions for receiving a designation of at least one destination graphical object in said UML diagram; and

instructions for propagating said selected at least one characteristic to said destination graphical object.

35. (Canceled)

36. (Currently Amended) A computer-readable medium holding computer-executable instructions, the medium comprising:

~~instructions for determining an intersection of characteristics common to a plurality of source components in a circuit diagram;~~

instructions for selecting at least one characteristic of a source component in a circuit diagram, said selected at least one characteristic including at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter in said intersection of characteristics;

instructions for receiving a designation of at least one destination component in said circuit diagram; and

instructions for propagating said selected at least one characteristic to said destination component.

37. (Currently Amended) A computer-readable medium holding computer-executable instructions, said medium comprising:

~~instructions for determining an intersection of characteristics common to a plurality of source components in a mechanical diagram;~~

~~instructions for selecting at least one characteristic of a source component in a mechanical diagram, said selected at least one characteristic including at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter in said intersection of characteristics;~~

instructions for receiving a designation of at least one destination component in said mechanical diagram; and

instructions for propagating said selected at least one characteristic to said destination component.

38. (Currently Amended) A computer-readable medium holding computer-executable instructions, the medium comprising:

~~instructions for determining an intersection of characteristics common to a plurality of source graphical elements in a biological diagram;~~

~~instructions for selecting at least one characteristic of a source graphical element in a biological diagram, said selected at least one characteristic including at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter in said intersection of characteristics;~~

instructions for receiving a designation of at least one destination graphical element in said biological diagram; and

instructions for propagating said characteristic to said selected at least one destination graphical element.

39. (Currently Amended) A computer-readable medium holding computer-executable instructions, the medium comprising:

~~instructions for determining an intersection of characteristics common to a plurality of source graphical elements in a network diagram;~~

~~instructions for selecting at least one characteristic of a source graphical element in a network diagram, said selected at least one characteristic including at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter; and~~
~~said intersection of characteristics;~~

instructions for receiving a designation of at least one destination graphical element in said network diagram; and

instructions for propagating said selected at least one characteristic to said at least one destination graphical element.

40. (Currently Amended) A computer-readable medium holding computer-executable instructions, the medium comprising:

~~instructions for determining an intersection of characteristics common to a plurality of source lines associated with a first block and a second block of a block diagram;~~

~~instructions for selecting at least one characteristic of a source line associated with a first block and a second block of a block diagram, said selected at least one characteristic including at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter; and~~
~~said intersection of characteristics;~~

instructions for receiving a designation of at least one destination line associated with a third block and a fourth block of said block diagram; and

instructions for propagating said selected at least one characteristic to said destination line.

41. (Original) The medium of claim 40, wherein said second block and said third block are the same block.

42. (Currently Amended) A computer-implemented method comprising:

~~determining an intersection of characteristics common to a plurality of source blocks in a block diagram;~~

selecting at least one characteristic of a source block in a block diagram, said selected at least one characteristic including at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter in said intersection of characteristics;

receiving a designation of at least one destination block in said block diagram; and
propagating said selected at least one characteristic to the least one destination block.

43. (Currently Amended) The method of claim 42 further comprising:

determining said at least one destination block in ~~is a~~ same block type as at least one source block in said plurality of source blocks.

44. (Currently Amended) The method of claim 42~~[[,]]~~ wherein said at least one destination block is designated based on ~~a second said selected at least one characteristic in said intersection of characteristics, said second selected at least one characteristic matching a second characteristic of said at least one destination block.~~

45. (Currently Amended) The method of claim 44~~[[,]]~~ wherein said ~~second at least one characteristic of said at least one destination block indicates that~~ said at least destination block is representative of a virtual subsystem.

46. (Currently Amended) The method of claim 42~~[[,]]~~ wherein said at least one destination block is a subsystem representing a plurality of blocks and said selected at least one characteristic is propagated to each of said plurality of blocks in said subsystem.

47. (Currently Amended) A medium holding computer-executable instructions, the medium comprising:

instructions for determining an intersection of characteristics common to a first source block and a second source block in a block diagram;

instructions for selecting at least one characteristic of a first source block and a second in a block diagram in said intersection of characteristics, said selected at least one characteristic including at least one of a functional attribute, a compiled attribute, an execution data field, a block method or a block parameter, said first source block having said selected at least one

| characteristic of a first value, said second source block having said selected at least one characteristic of a second value;

instructions for receiving a designation of a first destination block and a second destination block in said block diagram; and

instructions for propagating said selected at least one characteristic to said first destination block and said second destination block, said first value propagated to said first destination block and said second value propagated to said second destination block.

| 48. (Currently Amended) The medium of claim 47~~[1.1]~~ wherein said propagating determines said first destination block and said second destination block by the use of respective contexts relative to said first source block and said second source block.